

## REMARKS

This application has been reviewed in light of the Office Action mailed June 17, 2010. Reconsideration of this application in view of the below remarks is respectfully requested. Claims 4- 8 and 12 – 25 are pending in the application with Claims 20, 23 and 24 being in independent form.

By the present amendment, Claims 20, 23 and 24 are amended to recite:

“...detecting corrupted symbols in the symbol stream where prior knowledge of the symbol stream exists and correcting the symbol stream by substituting correct symbols for the corrupted symbols in the symbol stream...” Support for the recited features in Claims 20, 23 and 24 is found throughout the specification, for example page 5, lines 4 – 7, and page 13, lines 1 – 16. Therefore, no new subject matter is introduced into the disclosure by way of the present amendment.

Initially, Applicant thanks the Examiner for granting a telephone interview on September 14, 2010 to discuss the rejections. The below remarks and amendments to the claims reflect the outcome of the telephone interview in which agreement was reached that the prior art cited in the present Office Action fail to disclose or suggest the features recited in the claims as amended. In the interview, the Examiner indicated that a new search needs to be conducted. However, if no new references are discovered, which disclose the features in the claims, the claims will be allowed.

### **I. Objection to Claim 17**

Claim 17 is objected to for an informality. Specifically, Claim 17 is dependent from canceled Claim 2. In response, the typographical error has been corrected to reflect that Claim 17 depends from Claim 23.

Accordingly, Applicant respectfully requests withdrawal of the objection with respect to Claim 17.

## **II. Rejection of Claims 20, 23 and 24 Under 35 U.S.C. §103(a)**

Claims 20, 23 and 24 are rejected under 35 U.S.C. § 103(a) as allegedly obvious over U.S. Publication No. 2001/0005406 (hereinafter “Mege”), in view of U.S. Publication No. 2005/0147188 (hereinafter “Liu”), and further in view of U.S. Patent No. 7,035,337 issued to Sugiyama.

None of the cited references correct the symbol stream by substituting correct symbols for the corrupted symbols, as recited in the amend Claims 20, 23 and 24. Also, the cited references do not disclose estimating phase shift values and mean beat frequency at the locations of the sequences; and remodulating the symbol stream using the phase shift value (Claim 20) or both the phase shift value and the mean beat frequency (Claims 23 and 24).

Rather, Mege discloses inserting symbols into the stream output by the source. Thus, in Mege, no substitution of corrupted symbols with correct symbols is disclosed or suggested.

Regarding Sugiyama, the reference discloses replacing a code symbol that does not match a parameter with a code symbol representing an “end of block”. However, the “end of block” symbol is not a correct symbol. Rather, the “end of block” symbol is inserted to prevent the decoding software from freezing when the corrupted symbol is encountered. When the decoding software encounters the newly inserted “end of block” symbol, the remainder of the stream is ignored until a new “start” symbol is encountered.

Liu discloses training sequences and dummy bursts, but no disclosure or suggestion is found in Liu for correct the symbol stream by substituting correct symbols for the corrupted symbols.

Therefore, for at least the reasons presented above, Claims 20, 23 and 24 are believed to be allowable over the cited prior art references. Accordingly Applicant respectfully requests withdrawal of the rejection with respect to Claims 20, 23 and 24 under 35 U.S.C. § 103(a) over Mege in view of Liu and further in view of Sugiyama.

### **III. Rejection of Claims 4, 14 and 17 Under 35 U.S.C. §103(a)**

Claims 4, 14 and 17 are rejected under 35 U.S.C. § 103(a) as allegedly obvious over Mege, in view of Liu and Sugiyama, and further in view of U.S. Patent No. 6,301,470 issued to Brunner.

As presented above, the combination of Mege, Liu and Sugiyama fails to disclose or suggest correcting the symbol stream by substituting correct symbols for the corrupted symbols, as recited in independent Claims 20, 23 and 24. Brunner, taken alone or in any proper combination with Mege, Liu and Sugiyama, does not overcome the deficiencies identified above.

Therefore, for at least the reasons presented above, Claims 4, 14 and 17 are believed to be allowable over the cited prior art references as well. Accordingly Applicant respectfully requests withdrawal of the rejection with respect to Claims 4, 14 and 17 under 35 U.S.C. § 103(a) over Mege in view of Liu and Sugiyama, and further in view of Brunner.

### **IV. Rejection of Claims 5 – 8, 12 – 13, 15, 16, 18, 19, 21, 22 and 25 Under 35 U.S.C. §103(a)**

Claims 4, 14 and 17 are rejected under 35 U.S.C. § 103(a) as allegedly obvious over Mege, in view of Liu, Sugiyama and Brunner, and further in view of U.S. Patent No. 4,947,409 issued to Raith.

As presented above, the combination of Mege, Liu Sugiyama and Brunner fails to disclose or suggest correcting the symbol stream by substituting correct symbols for the corrupted symbols. Raith, taken alone or in any proper combination with Mege, Liu Sugiyama and Brunner, does not overcome the deficiencies identified above.

Therefore, for at least the reasons presented above, Claims 4, 14 and 17 are believed to be allowable over the cited prior art references as well. Accordingly Applicant respectfully requests withdrawal of the rejection with respect to Claims 4, 14 and 17 under 35 U.S.C. § 103(a) over Mege in view of Liu Sugiyama and Brunner, and further in view of Raith.

### CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 4 – 8 and 12 – 25, are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Applicant's undersigned attorney at the number indicated below.

Respectfully submitted,

/Paul J. Esatto, Jr./

Paul J. Esatto, Jr.  
Registration No. 30,749

Scully, Scott, Murphy & Presser, P.C.  
400 Garden City Plaza, Suite 300  
Garden City, New York 11530  
(516) 742-4343  
PJE/DAT:dk